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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,714	07/28/2003	Larry Blythe Hostetler JR.	LUTZ 2 00222	6721

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EXAMINER	
GAY, SONIA L	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/628,714	HOSTETLER, LARRY BLYTHE	
	Examiner	Art Unit	
	SONIA GAY	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to Application No. 10/628,714 submitted on 07/28/2003 in which claims 1 - 20 are presented for examination.

Claim Objections

1. Claim 4 is objected to because of the following informalities:

The comma should be removed from "wherein one copy of the selected process runs on, one or more of the duplexed call-monitoring systems while the remaining copy remains stopped or idle on the remaining call-management system."

In addition, remains or runs should be removed from "while the remaining copy remains runs on the remaining call - management system, however, one of the copies is inactive".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6 – 8, 12 – 14, and 18 - 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6- 8, 12 – 14, and 18 – 20 recite the limitations "HA Master, HA Master Watcher, HA Spawner, HA Monitor, and HA Server." The acronym HA should be spelled out when it first appears in the claims.

Claim 4 recites the limitation "duplexed call- monitoring system". There is insufficient antecedent basis for this limitation in the claim. The examiner interpreted the limitation to read "duplexed call -management system ".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 9- 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Ezerzer et al. (US 6,697,858) in view of Yip et al. (US 7,376,951), and further in view of Atkinson et al. (US 6,137,862), and further in view of Vargas et al. (US 6,918,115).

For claims 1, 9, and 15, Ezerzer et al. discloses a call –center system and a multi-tenant call management system, said call-management system hosting a plurality of processes, including a plurality of tenant process and a plurality of system processes, a method of configuring and monitoring said processes on said system,

the call- center system comprising:

a plurality of telephone lines (column 6 lines 66 – column 7 line 2);

a plurality of agent positions (column 6 lines 66 – column 7 line 4);

a call distribution system connecting said plurality of agent positions to said plurality of telephone lines (column 5 lines 5 – 33);

a multi-tenant call- management system connected to the call distribution system, said system hosting a plurality of processes, including a plurality of tenant application processes and a plurality of system processes, including

a storage system for storing database files and processes (column 25 lines 61 - 67)

a computer system having memory for processing said database files and running selected processes stored on said storage system (column 22 lines 6 - 20) ; and,

a method of configuring and monitoring said system, the method comprising:

configuring said system (column 13 lines 45 – 59; column 15 lines 15 – 33), said configuring including:

grouping selected processes into a plurality of tenant groups(column 3 lines 1 – 7, 41 - 57; column 13 line 55 – 58);

defining a priority for each of said plurality of processes (column 19 line 6 – 7; column 25 lines);

starting each of said plurality of processes (column 14 lines 39 – 40);

retrieving said configuration by the call-center system (column 14 lines 41 – 56).

Yet, Ezerzer et al. fails to teach the following:

a configuration file wherein the configuration file includes defining dependencies and priorities between said plurality of system processes and said plurality of tenant processes and defining a monitoring frequency for each of said plurality of processes;

reading said configuration file and starting each of said plurality of processes in correspondence to said dependencies and said priorities; and,

monitoring each of said plurality of processes based on said monitoring frequencies.

However, Ezerzer et al. discloses that upon starting the CALL CENTER executable, the call-management system checks a network database for its configuration information i.e. parameters (column 15 lines 55 – 62; column 25 lines 61 - 67). The examiner takes official notice that it was well known in the art at the time of applicant's invention that a database contains files for the purpose of storing and retrieving data such as would be included in a configuration file.

Moreover, Yip et al. discloses a configuration file located in a configuration database which contains process dependency information for the purpose of ensuring that all required dependent processes are running at the start of a new process (column 3 lines 21 – 29; column 5 lines 31 – column 6 line 1);

Additionally, Atkinson et al. discloses a duplexed call management system which comprises a process for the purpose of monitoring configured processes (column 4 lines 61 – 66; column 5 lines 31 – 47).

Moreover, Vargas et al. discloses a process monitor which uses a predefined frequency for the purpose of periodically verifying the existence of one of more critical processes (column 1 lines 30 - 34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's to modify the teachings of Ezerzer et al. with the teachings of Yip et al., Atkinson et al., and Vargas et al., so that the database disclosed above in Ezerzer et al. comprises a configuration file which is read at the initialization of the call-center system and contains the configuration data disclosed above in Ezerzer et al. as well as the following:

defined dependencies between said plurality of system and tenant processes for the purpose of starting each of said plurality of processes in said call-center system in correspondence to said dependencies and said priorities; and,

a monitoring frequency for the purpose of monitoring and verifying the existence of one or more critical processes.

For claims 2 -3,10, and 16, the teachings of Ezerzer et al. and Atkinson et al. further disclose

starting copies of each of said plurality of processes in a secondary call – management system, wherein said call call-management system is a duplex system (Atkinson et al.: column 4 lines 45 – 66).

defining a run status for each of said plurlaity of processes (Ezerzer et al. : column 19 lines 6 – 7).

For claims 11 and 17, Atkinson et al. further discloses wherein each of said duplexed call-management system includes one or more load-sharing nodes, each node hosting selected processes (Atkinson et al. : Fig. 2 and column 5 lines 12 – 21).

For claims 12 – 14 and 18 - 20 , the teachings of Ezerzer et al. and Atkinson et al. further disclose

controlling each of said duplexed call-management systems with a respective HA Server process running on one node of each of said duplexed call-management systems (Ezerzer et al. : column 22 lines 6 – 19; Atkinson et al.: column 4 lines 61 - 66)

monitoring processes on each of said nodes under control of said HA Server process with a respective HA Monitor process running on the same node as said monitored processes, said HA Monitor process broadcasting a respective state of each of said monitored processes to all remaining HA Server processes (Ezerzer et al.: column 21 lines 5 – 15; Atkinson column 4 lines 61 - 66);

starting and stopping selected process of said monitored processes with a respective HA Spawner process running on the same node as said monitored processes in response to requests from said HA Server process, said HA Monitor process and an HA Master process (Ezerzer et al. : column 22 lines 6 – 19; Atkinson et al.: column 4 lines 61 - 66)

and watching said HA Server process, said HA Monitor process, and said HA Spawner process with an HA Master process running on the same node as the respective HA Server process, HA Monitor process, and HA Spawner process, starting and stopping said watched processes in response to states of said watched process (Atkinson et al. : column 5 lines 31 – 48;);

watching said HA Master process with an HA Master Watcher process running on the same node as the respective HA Master process, said HA Master Watcher process starting and

stopping said watched HA Master process in response to a state of said HA Master process (column 6 lines 24 - 34).

watching said HA Master Watcher process with an HA Master process running on the same node as the respective HA Master process, said HA Master Watcher process starting and stopping said watched HA Master Watcher process in response to a state of said HA Master process (column 6 lines 24 - 34).

5. Claims 4 - 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezerzer et al. (US 6,697,858) in view of Yip et al. (US 7,376,951), and further in view of Atkinson et al. (US 6,137,862), and further in view of Vargas et al. (US 6,918,115), and further in view of Menasce et al. (US 2004/0059957).

For claim 4, the teachings of Ezerzer et al. further discloses defining selected processes of said plurlaity of processes as hot run status, wherein both copies of the selected application run ,however with one copy in standby, but with its state kept current with a state of the remaining copy (column 3 lines 65 – 67; column 19 lines 6 -7).

Yet, Ezerzer et al. fails to teach the following:

defining selected processes of said plurality of processes as cold-standby run status, wherein one copy of the selected process runs on one of the duplexed call-monitoring {call-management} systems while the remaining copy remains stopped of idle on the remaining call-management system;

defining selected processes of said plurlaity of processes as warm run status, wherein one copy of the selected process runs on one of the duplexed call-monitoring{call- management}

systems while the remaining copy remains running on the remaining call-management system, however, one of the copies is inactive;

defining selected processes of said plurlaity of processes as load sharing run status, wherein both copies of the selected process run and actively handle requests, sharing the overall load.

However, Menasce et al. discloses an architecture wherein network equipment can operate in hot or cold standby or load sharing for the purpose of providing fault tolerance which is the ability for a system to respond gracefully to an unexpected component failure ([0005] [0006] [00007]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the teachings of Ezerzer et al. with the teachings of Menasce et al. to define the runs status for each of the plurlaity of processes as hot, cold, or load sharing for the purpose of providing fault tolerance in the duplexed, call management system.

For claim 5, Atkinson et al. further discloses wherein each of said duplexed call-management system includes one or more load-sharing nodes, each node hosting selected processes (Atkinson et al. : Fig. 2 and column 5 lines 12 – 21).

For claims 6 -8, the teachings of Ezerzer et al. and Atkinson et al. further disclose

controlling each of said duplexed call-management systems with a respective HA Server process running on one node of each of said duplexed call-management systems (Ezerzer et al. : column 22 lines 6 – 19; Atkinson et al.: column 4 lines 61 - 66)

monitoring processes on each of said nodes under control of said HA Server process with a respective HA Monitor process running on the same node as said monitored processes, said HA Monitor process broadcasting a respective state of each of said monitored processes to all remaining HA Server processes (Ezerzer et al.: column 21 lines 5 – 15; Atkinson column 4 lines 61 - 66);

starting and stopping selected process of said monitored processes with a respective HA Spawner process running on the same node as said monitored processes in response to requests from said HA Server process, said HA Monitor process and an HA Master process (Ezerzer et al., column 22 lines 6 – 19; Atkinson et al.: column 4 lines 61 - 66)

and watching said HA Server process, said HA Monitor process, and said HA Spawner process with an HA Master process running on the same node as the respective HA Server process, HA Monitor process, and HA Spawner process, starting and stopping said watched processes in response to states of said watched process (Atkinson et al. : column 5 lines 31 – 48;);

watching said HA Master process with an HA Master Watcher process running on the same node as the respective HA Master process, said HA Master Watcher process starting and stopping said watched HA Master process in response to a state of said HA Master process (column 6 lines 24 - 34).

watching said HA Master Watcher process with an HA Master process running on the same node as the respective HA Master process, said HA Master Watcher process starting and stopping said watched HA Master Watcher process in response to a state of said HA Master process (column 6 lines 24 - 34).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SONIA GAY whose telephone number is (571)270-1951. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sonia Gay/
Examiner, Art Unit 2614

October 11, 2008

/Ahmad F. Matar/
Supervisory Patent Examiner, Art Unit 2614